SYNOPSIS

Status of ICT Infrastructure in College Libraries colleges affiliated to Shivaji University, Kolhapur

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By

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CHAPTER-I

INTRODUCTION

Unit No.	Title
1.1	Introduction
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1.1 Introduction

Education plays a key role for the development of any society. College level education is one among the different levels in the education system in imparting the value based education in different disciplines. Colleges are the most important institutions of society for the creation, preservation and dissemination of knowledge as well as the custodians of intellectual and ethical traditions and values in society. Colleges serve teaching, learning and research needs of education in the country. They primarily serve undergraduate students, and teaching community. In these days in view of reaching the higher education to all, quite a good number of undergraduate colleges have started post-graduate level education also and a few of them are also recognized as research centers. The standard of teaching, learning and research at a college largely depends upon the quality of the service rendered by thelibrary. Therefore, now a day'shigher education is meant a 'class' education instead of 'mass' education.

The growth and development of Information and Communication Technology (ICT) is playing vital role in the process of advancement of society in general and in library and information science in particular(Brose, 2001). Rapid advances in ICT in the past two decades have brought revolutionary changes in the concept, organization, functioning and management of library and information systems throughout the world. The impact of these changes are pervasive and effecting all the aspects of library operations, information resources and services, staff skills requirements and user expectations. The accelerating pace of developments in WWW has tremendously increased the ability to access, store, and process, communicate and deliver information services to the library users. ICT has a huge potential for providing wide range of new opportunities and offering better solutions to achieve greater levels of efficiency, productivity and higher standards of quality services inlibraries.

Automation of library services isan importantfactor for efficient and effective working of the library and information centers. Library automation provides wider horizons for the proper handling, organization, retrieval and dissemination of information, thus making library services more scientific, systematic and effective (Seema Vashista, 2007).

ICT stands for "Information and Communication Technologies," refers to technologies thatprovide access to information through telecommunications. It is similar to InformationTechnology (IT) but focuses primarily on communication technologies. This includes theInternet, wireless networks, cell phones, and other communication mediums (TechTerms, 2010).The phrase ICT has been used by academic researchers since the 1980s, but it became popularafter it was used in a report to the UK government by Dennis Stevenson in 1997 and in therevised National Curriculum for England, Wales and Northern Ireland in 2000 (Wikipedia, n.d.).In the past few decades, ICT has provided society with a vast array of new communicationcapabilities. For example, people can communicate in real-time with others in different countriesusing technologies such as instant messaging, voice over IP (VoIP), and video-conferencing.Modern ICT has created a "global village", in which people can communicate with others acrossthe world as if they were living next door (TechTerms, 2010).

The application of ICT on library basically employs on its routine functions like acquisition,technical processing, circulation, periodical management, stock verification, digitization andother maintenance works of the library. To save the time of the user as well as library workers,nowadays, computerization work is very much important for the library. ICT provides suchplatform through which librarians can provide enhanced and very much improved libraryservices to their users well in time. In present day scenario, libraries, as well as librarians, haveto face many challenges, some of them are:

• Change in the information needs of the users
• Change in the information habit of the users
• The openness of libraries to people (with OPAC, Websites, & Social Networks), and
• Networking which has made possible to expand access to resources.

To cope up with the above-mentioned challenges, the libraries have to employ ICTInfrastructure. Another side, libraries have shown progress over the past few years due to theapplication of ICT based tools and technologies in their services&facilities

1.2 **The Review ofLiterature**

Large numbers of studies have been conducted by the researchers in different contexts on the topic chosen for the present study. Here an humble attempt is made to review few of them.

College libraries are facing major constraints in reaching high level usage of ICT for automation of library services. Sampath Kumar and Biradar (2010) reported the findings of the survey in use of ICT in college libraries **in** affiliated Shivaji University, Kolhapur. It was found that college libraries not reached the very level in using ICT for automation due to lack of budget, lack of manpower, lack of skilled staff and lack of training. They also pointed out the badly need of extensive and appropriate training to library professionals to make use of ICT tools and techniques. This paper also suggests to change the mindset of librarians in their attitudes to use ICT applications in various activities of the library and informationcenters.

According to Arup Kumar and Amit Kumar (2010), in their study “application of ICT and related manpower problems in the college libraries in Burdwan”, pointed out college libraries of Burdwan Sadar face several hindrances in full-fledged IT application. The primary factor was inadequate funds, insufficient manpower, lack of ICT skill among the library professionals and lack of right attitude of the authorites.

Lata & Singh (2014) surveyed the status of ICT infrastructure in Health Information Systemwhich included previous exercises to map ICT in the health sector in developing countries, whitepapers, technical reports, research reports on the aspects of ICT and public health, policy issues related,and evaluations in this area. Seena & Pillai Sudhier (2014) studied the ICT skills amonglibrary professionals in the Kerala University library system and revealed that majority (88.6%)of the library professionals are skilled in Windows operating system whereas management ofelectronic resources is reasonably known to 51.9% professionals. Among Web 2.0 technologies,email/ instant messaging on chat was

frequently used by 85.9% professionals, and wishes werefrequently used by 69.1% professionals. Praveen Kumar (2013) studied the application of ICT instate libraries

of Haryana and Chandigarh and concluded that library automation is one of theeffective and efficient applications of ICT. Ruan & Qiang (2013) conducted a study to know therole

of information technology in academic libraries' resource sharing in Western China andrevealed the economic inequalities in the Eastern and Western Regions of China. The study
shows that the information sharing resources are huge in Eastern China whereas in WesternRegions it is less due to insufficient funds. Although in the eastern region, it is well-providedfunds from the central government which is lacking in the Western Region of China. Due to this,the students face problems in Western China in terms of ICT infrastructure. There is a greatdemand to the central government to provide more fund and ICT infrastructure to the westernregion equally with the eastern parts for the development and growth of the country throughCALIS. Vanden Elzen & Roush (2013) studied the gaming programs for the students in theacademic libraries. It plays a very important role for the students for their higher education thelibraries not only need to focus on instructing students about library resources but also need toactively reach out to them by integrating gaming programs in academic libraries. This study alsoreflects the integration of games in academic libraries in Wisconsin, USA and the staff of theuniversity library has been successfully incorporating games into library outreach programming.It shows the effective results to the students efficiently by offering such kind of video gaming in

A lot of work has been published in the field of library automation. Watane, Vinchurkar and choukhande (2005) studied the "computer literacy and use of IT in college libraries of Amravati city" covering IT awareness of the library professionals and IT application in libraries. Lohar and Kumbar(2005) in their study on the present situation of college libraries in Shimoga District (Karnataka) have concluded that the situation do not meet the prescribed norms. Chakraborty and Maisal(2005) found library automation and networking do not depend only on the capacity of the computer or the networking server or even the software used since they are only tools. Much depends on the quality of manpower of the libraries and the perfection of the work they do. Sen(2005) studied on automation of a college library. According to her, entire library automation programme requires judicious decision making at various stages. Such decision may be related to 'do it' or 'buy it' services, selection of hardware and software platform, application software, types of services to be rendered, etc. Banerjee(2007) studied networking of Government College libraries of WestBengal.

In addition to the literature reviewed here many more studies and surveys were carried out on provision and use of ICT and its applications in library and information services and as well as the assessment of competency skills among the library professionals in handling the ICT in libraries. But no systematic work has been attempted by any researcher towards assessing the status of application of modern technologies in the college libraries.Status of ICT Infrastructure in College Libraries affiliated Colleges of Shivaji University, Kolhapur. With the research objectives to be covered in thisstudy.

1.3 The objectives of the study are:

The objectives of the study are:

- To assess the status of ICT infrastructure facilities available in the college Libraries colleges affiliated to Shivaji University Kolhapur
- University' To assess the constraints in acquiring ICT infrastructurebythecollege libraries colleges affiliated to Shivaji University Kolhapur
- To identify the solutions to improve the ICT infrastructure in the college libraries colleges affiliated to ShivajiUniversity, Kolhapur.
- To present a 'model' of ICT infrastructure for college library.

1.4HYPOTHESES:

For the present study the following hypotheses have been formulated:

- AcademicsColleges affiliated to Shivaji University Kolhapurunder the study are having adequate ICT infrastructure for their officeautomation.
- Majority of the college libraries have overcome the difficulties for implementation of ICT in the college libraries.
- There are solutions to improve ICT infrastructure in the college libraries.
- A 'Model'of ICT infrastructure is the requirement of college libraries.

1.5SCOPE AND LIMITATIONS OF THESTUDY

The study is confined to the following issues:

1. To study theexistingICTinfrastructure used for college library services in the college libraries, Colleges affiliated to the Shivaji University, Kolhapur
2. To Study the competency skills among the libraryprofessionals Colleges affiliated to the Shivaji University, Kolhapur
3. To present a "Model" of ICT infrastructure for college libraries colleges affiliated to the Shivaji University, Kolhapur in Maharashtra state up to 2018.

1.6 Data Collection Method:-

The research problems 'Status of ICT Infrastructure in College Libraries in Collegesaffiliated Shivaji University Kolhapur will be studied by doing survey primarily and information will be collected from the librarians through questionnaire and will be also interviewed personally if necessary to avoid the constraint of study.

The collected data and information will be analyzed by applying statically Method and certain techniques of research methodology. The inferences will be drawnof the study will be based on the analysis of datacollected.

1.7.1 Questionnaire Design:-

Questionnaire is often used in survey as primary data collection tools, questionnaire is a device for securing answer to questions by using a form which the respondent fills it is a fairly reliable too for gathering data from large varied and scattered socialgroup.

1.8CONSPECTUS:-

The present work has been divided in five chapters.

Chapter I- Introduction.

First chapter deals with preamble proposed research definitional analysis objectives, hypothesis scope and limitation methodology and conspectus etc.

Chapter II- The Review of Literature

This chapter will deal with the relevant review of literature. This analysis of the reviewed of literature is the key focus of any research it enables to be aware of the part and current trends in any particular branch of research. It is an objectives analysis and interpretation of contributions of author literature is grouped on followingways.

- Introduction
- Authorshippattern
- ICT Infrastructure
- CitationAnalysis
- Co-Authorship pattern
- Conclusion

Chapter III–Research Methodology:-

This chapter presents details regarding the research methodology adopted procedures adopted in data collection from college librarians working in affiliated colleges in Shivaji University'. Using a structured questionnaire.

The survey method will be used to conduct the study. For the data collection, a structured questionnaire will framed for the college librarians to ascertain the infrastructures developed by the library to provide the library services. A considerable amount of information on the resources, facilities, and services of college libraries will be collected from their printed brochures and official websitesetc.

Chapter IV – Data Analysis and Interpretations.

This chapter with the research status ICT Infrastructure of college librariesaffiliated Colleges ofShivaji University Kolhapur. This deal with the statistic analysis of the collected data for the analysis Minitab software as well as other statically toolsi.e. Ms Excel are used. The data presented in table form, pictorial, graphical form with interpretation for testing the hypothesis square test will be used.

Chapter V- Findings, Conclusion and Implications.

This chapter summarizes the major findings and implications. Thesiswill endwith concrete findings and concrete solutions with a 'Model' for ICT infrastructure for college library. Further details and bibliographical references and appendices will be provided.

- Appendix
- Questionnaire
- List of Colleges

References:-

1] Kothri, C.R. (2010). Research Methodology: Methods and Techniques New Delhi: New age International publishers.

2] Zainab, A.N. (1999). personal Academic and departmental correlated of research productivity: An review of literature. Malaysian journal of library and information science. 4 (2), 73-110P.

3] Kumar, P.S.G.(2004). A students manual of library and information science. B.R. publishing, New Delhi.

4] Bottle, R. Hussain, S, Bottle, A, and Adsayna, O.(1994). The productivity of British , American and Nigerian chemist compared Journal of information science, (2), 211-215P.

5]Hattie,John.....etal. (1994). The productivity Australian in education. Australian journal of education.38(3),201-218P.

6]Syverson, chad.(2011). What determines productivity. Journal if economic literature. Page No.326-365.

7] Sawai. Amol. B. (2016) "Research productivity of academic librarians affiliated to Dr. Babasaheb Ambedkar Marathwada University Aurangabad: A scientometric study."

8]Ramesh Babu, B et al. "ICT Skills Among Librarians in Engineering Educational Institutions in Tamil Nadu." DESIDOC Bulletin of Information Technology 27.6 (2007): 55-64.

9]Sampath Kumar, B.T and Biradar,B.S. "Use of ICT in College Libraries in Karnataka, India: a Survey". Electronic Library and Information Systems, 44.3 (2010):271-282.

10]Seema Vasishta. "Library Automation and Networked Services: A Case Study at the Technical Deemed University Libraries in North India." IASLIC Bulletin 52.2 (2007): 120-126.

11]Singh, Rajesh Kumar, Agarwal, Anil and Jawaharlal. "Information and Communication Technology Literacy Among the Staff of Banaras Hindu University Library System: A Case Study." Library Herald 47.3 (2009):242-254.

12]Sen, Puravi. Automation of a college library:Some issues. *In* Automation and Networking of the college libraries, edited by Biswajit Banerjee. Maulan Azad College, Kolkata, 2005, 125-26.

13] Somerville, Mary M, Smith, Gordon W, and Macklin, Alexius Smith. "The ETS Skills™ Assessment: A Digital Age Tool." The Electronic Library 26.2 (2008): 158-171.

14]Venkata Ramana, P. Information Technology Applications in Libraries, New Delhi: Ess Ess Publications,2004

15]Watane, Anjali; Vinchurkar, A.W. & Choukhande, Vaishali. Library Professionals' computer literacy and use of information technology application in college libraries of Amaravati city. *IASLIC Bulletin*, 2005, **50**(3),131-41.

16] Dilli K.T. -Library and Information Science in a Digital Era, Atlantic Publishers and Distributors Pvt Ltd, Jan 5,2009

17] Dr.Kailash D. Tandel- ICT application in Library and Information Science, Publisher: Write and print publication Edition:1,2017

18]Veer,Dharmaraj Ketal,Advanced applications of ICT in Academic Libraries, Publishers Agribiovet ,Press, 2015.

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